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**(12) United States Patent  
Lebreton****(10) Patent No.: US 10,391,202 B2****(45) Date of Patent: \*Aug. 27, 2019****(54) HYALURONIC ACID-BASED GELS  
INCLUDING LIDOCAINE****(71)** Applicant: **Allergan Industrie SAS**, Pringy (FR)**(72)** Inventor: **Pierre F. Lebreton**, Annecy (FR)**(73)** Assignee: **Allergan Industrie SAS**, Pringy (FR)**(\*)** Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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**Related U.S. Application Data****(63)** Continuation of application No. 15/173,850, filed on Jun. 6, 2016, which is a continuation of application No. 13/891,052, filed on May 9, 2013, now Pat. No. 9,358,322, which is a continuation of application No. 12/393,768, filed on Feb. 26, 2009, now Pat. No. 8,450,475.**(60)** Provisional application No. 61/085,956, filed on Aug. 4, 2008, provisional application No. 61/087,934, filed on Aug. 11, 2008, provisional application No. 61/096,278, filed on Sep. 11, 2008.**(51) Int. Cl.****A61L 27/52** (2006.01)**A61K 8/42** (2006.01)**A61K 8/73** (2006.01)**A61L 27/20** (2006.01)**A61L 27/54** (2006.01)**A61Q 19/08** (2006.01)**A61K 31/167** (2006.01)**A61K 31/728** (2006.01)**A61K 9/00** (2006.01)**A61K 9/06** (2006.01)**A61K 47/36** (2006.01)**(52) U.S. Cl.**CPC ..... **A61L 27/52** (2013.01); **A61K 8/42** (2013.01); **A61K 8/735** (2013.01); **A61K 9/0021** (2013.01); **A61K 9/06** (2013.01); **A61K 31/167** (2013.01); **A61K 31/728** (2013.01); **A61K 47/36** (2013.01); **A61L 27/20** (2013.01); **A61L 27/54** (2013.01); **A61Q 19/08** (2013.01); **A61L 2300/402** (2013.01); **A61L 2300/602** (2013.01); **A61L 2400/06** (2013.01)**(58) Field of Classification Search**CPC ..... **A61K 8/42**; **A61K 8/735**; **A61K 9/0021**; **A61K 9/06**; **A61K 31/167**; **A61K 31/728**; **A61L 27/52**; **A61L 27/20**; **A61L 27/54**; **A61L 2300/402**; **A61L 2300/602**; **A61L 2400/06**; **A61Q 19/08**

See application file for complete search history.

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**(57) ABSTRACT**

Disclosed herein are soft tissue fillers, for example, dermal and subdermal fillers, based on hyaluronic acids and pharmaceutically acceptable salts thereof. In one aspect, hyaluronic acid-based compositions described herein include a therapeutically effective amount of at least one anesthetic agent, for example, lidocaine. The present hyaluronic acid-based compositions including lidocaine have an enhanced stability, relative to conventional compositions including lidocaine, for example when subjected to sterilization techniques or when stored for long periods of time. Methods and processes of preparing such hyaluronic acid-based compositions are also provided.

**30 Claims, 1 Drawing Sheet**